The Madre de Dios River

The goal of the study is to monitor vulnerability to heavy metal contamination and emerging diseases as a result of small scale gold mining in the Peruvian Amazon.

Environmental Sampling
- Collected 20 fish samples for mercury analysis
- Conducted air monitoring to examine the effects of indoor air pollution
- Collected over 1000 bug samples to characterize potential vectors for disease
- Collected 40 soil samples to test for risk factors for Leishmaniasis

Oral Health Prevention and Anemia Testing
- Worked with the regional health directorate in MDD to implement oral health and anemia prevention presentations in each community
- Worked with fieldworkers to administer anemia testing
- Dispensed 500 donations of toothbrushes, mouthwash, and toothpaste in each community
- Dispensed multivitamin supplements to help prevent anemia

Health Sampling
- Worked with Peruvian fieldworkers to conduct health surveys and collect 60 human samples.
- Collected hair and nail samples to analyze for heavy metal contamination.
- Collected blood samples to test for heavy metal contamination and presence of infectious diseases.

Students practicing oral hygiene techniques and anemia testing.

Essential Partners: Peruvian Ministry of Health, Naval Medical Research Unit - 6, DIRESA (the regional health directorate in MDD)
Advisers: William Pan | DGHl and the Nicholas School of the Environment; Helen Hsu Kim | Pratt School of Engineering; Marco Marani; Joel Meyer | Nicholas School of the Environment; Field Coordinator: Ernesto Ortiz; Postdoctoral Fellow: Beth Feingold